Florida WILDLIFE®

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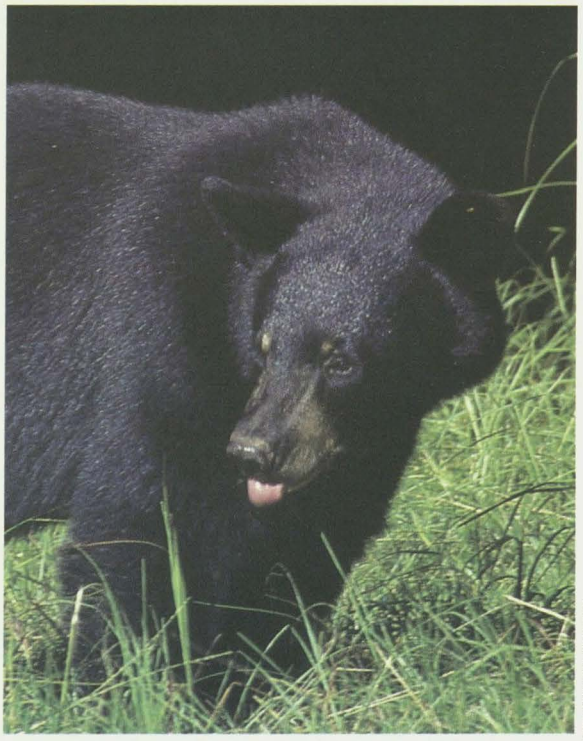

BARRY MANSELL

15-18, *Special Pull-out Section, 1995 Wild Florida Calendar*

DEPARTMENTS

26 **Book Reviews**
32 **1995 Cover Art Contest**

COVERS

Our front cover features a gray fox, photographed by Ted Rose. A picture of a tufted titmouse, taken by William J. Weber, is shown on the back cover.

ACKNOWLEDGEMENTS

Tricia Roberts, office manager; Cheri Barineau, Jeffrey Johnston, circulation assistants; Bill Greer, contributing photographer; Scott Ball, consulting editor; and Rose Printing Company of Tallahassee.

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Fire Tower Barn Owls

By Ben H. Wolcott

Sonny Greene climbed the old Sand Hill Fire Tower on Blackwater River State Forest for what seemed like the tenth week in a row. The reason for the climb was not to look for fires, but to see whether the old tower had finally been vacated by a family of barn owl chicks.

Sonny is the operations administrator at Blackwater Forestry Center. It was his assignment to coordinate the relocation of Sand Hill Tower to a new site at the Forestry Center. Tower relocation projects are fairly routine for the Division of Forestry – although technical skill and attention to detail are certainly required, no one mentioned anything to Sonny about barn owls being involved!

Barn owls are perhaps the most interesting of owls. They are distinguished by a heart-shaped face, long legs, and the most beautiful tones of buff, cinnamon, brown and gray. Barn owls are strictly nocturnal, and not often seen. It is not known how many pairs reside and breed in northwest Florida.

Like many other raptors, barn owls migrate during the winter, going as far south as necessary to maintain a food supply. Their diet consists almost entirely of mice, rats and other small rodents.

They usually roost in old barns, church steeples, cupolas or the like. Apparently they do not bring nesting materials to their maternity site, but disgorge pellets of undigested food matter (fur, bones, etc.) onto a flat surface to make the nest. It would be hard to imagine a more suitable structure for a barn owl nest than an old abandoned fire tower with a hole in the floor!

Sand Hill Tower stood 100 feet tall, 30-40 feet higher than surrounding trees. Entry to the 8-foot-square tower cab was through a trap door in the floor, which had been left open by an obliging visitor. Although windows circled the cab, many of them were broken. The tower site was deserted, with some fallen-down buildings and cultivated fields not far away.

In late May or early June of 1990, five barn owl eggs were laid in the old tower. Four hatched, and three of the hatchlings survived. Not many bird nests attract so much attention!

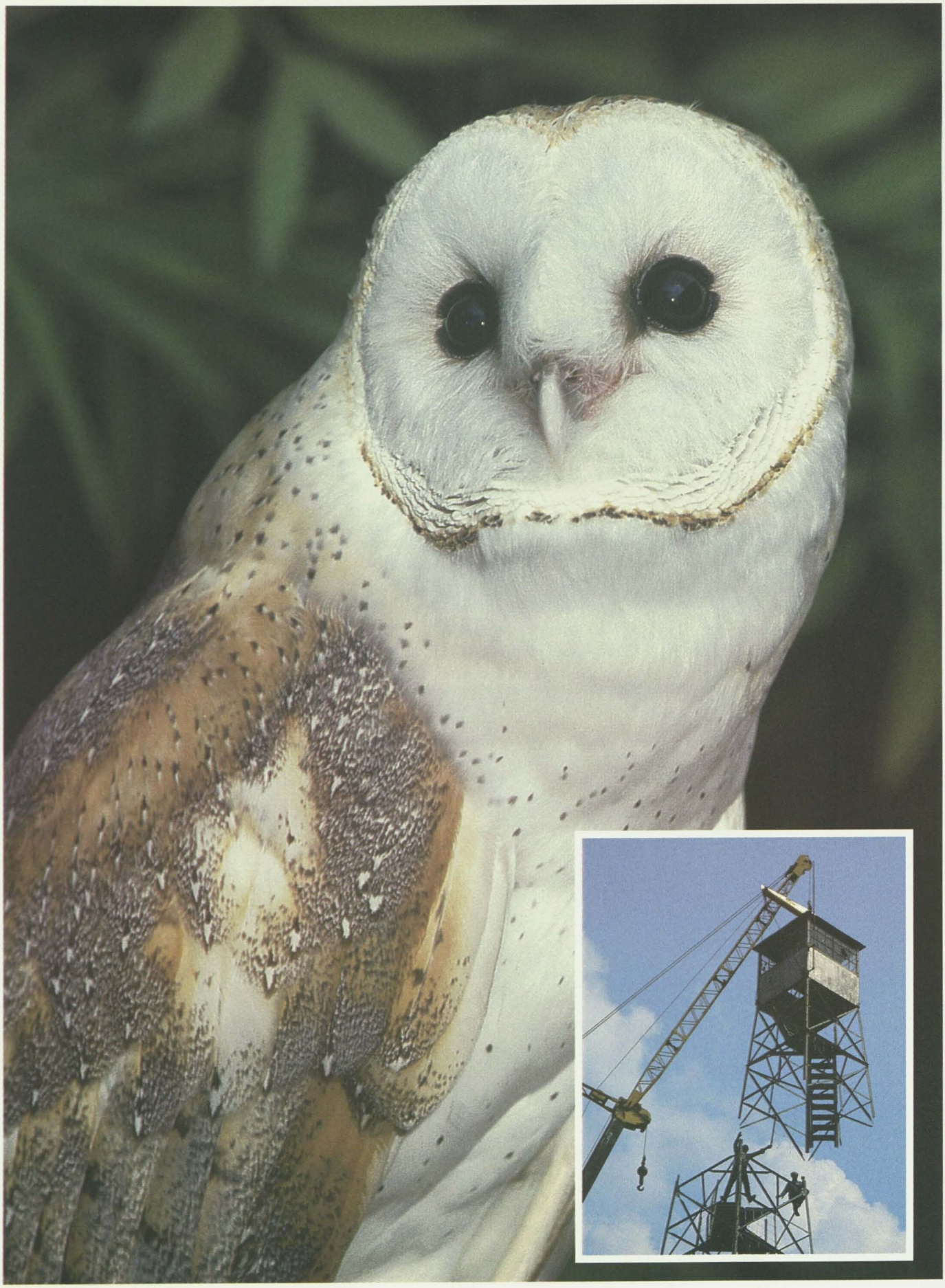
Division of Forestry personnel discovered the fledgling owls in early June, during the process of measuring the tower. The baby owls were estimated to be two to three weeks old. There was no chance that they would leave the nest before June 30, which was the last day of the fiscal year. There was no choice but to arrange for the tower relocation project to be postponed until the young owls matured enough to abandon the nest. For the next several weeks, the baby owls were carefully watched.

Although no one entered the tower cab, a human head made a weekly appearance in the trap door opening. The owls would rise in unison, shoulder to shoulder, and begin to sway from side to side like a dance team, clicking their beaks in agitation. Eventually they began to crouch and mantle their wings as if preparing to launch an attack. Instead of taking aggressive action, however, the birds would tuck their heads completely between their legs, gazing at the floor and shaking their heads. The ritual of looking up, then down, then shaking the head continued on about a two-minute cycle as long as a human was present.

No owl other than the three chicks was ever observed. The mother owl may have been roosting in a nearby tree, but she never indicated her presence, even while her nest was being inspected.

Finally, about six weeks after they were discovered, the last of the young barn owls left the nest in the old fire tower. An erection crane was brought to the site and the tower was taken apart in three sections. It was transported to Blackwater Forestry Center, where it has been re-erected and returned to service. Visitors to the tower are welcome, but Sonny Greene always reminds them to please close the trap when they leave!

Ben H. Wolcott works as maintenance administrator for the Division of Forestry at Blackwater River State Forest.



LYNN STONE

INSET PHOTO BY BEN H. WOLCOTT

Ding Darling Refuge

Hot Spot For Wildlife

By Tom and Joanne O'Toole

The J.N. "Ding" Darling National Wildlife Refuge on Sanibel Island, a 5,393-acre preserve, is one of Florida's best wildlife observation sites.

Located on the Gulf coast, the refuge is used by nearly 300 bird species, more than 50 types of reptiles and amphibians, and at least 32 species of mammals. Because it is situated along the Atlantic Flyway, some of these are seasonal visitors.

The abundance of wildlife brings out other visitors. Each year nearly 750,000 outdoor enthusiasts make the turn off the Sanibel-Captiva Road to experience Florida as it once was.

Open year-round, the refuge offers walking and canoe trails, and a five-mile, one-way Wildlife Drive, an auto tour that crosses brackish and freshwater systems. Visitors are likely to see spectacular wildlife, including the mottled duck, American swallow-tailed kite, white ibis, wood stork, gray kingbird, the rare and seldom-sighted mangrove cuckoo and huge flocks of roseate spoonbills. For the past several years, a lone American crocodile, at the northern limit of its range, has been observed on the refuge.

Birdwatchers will likely spot painted buntings, red-eyed vireos, yellow-crowned night herons, orange-crowned warblers, ospreys, brown pelicans and the gregarious moorhens. Keep an eye out, as well, for the federally endangered wood stork and threatened bald eagle.

More common are cormorants, ducks, egrets and herons floating or standing motionless in the brackish shallows, on mud flats and on tiny islands less than 100 feet from the roadside. From December through May, visitors can see blue-winged teal, red-breasted mergansers and white pelicans. Look for American alligators basking in the sun.

If you can plan your drive through the refuge at the low tide feeding time, or at sunrise or sunset, you have a much greater chance of seeing more birds. Take a pair of binoculars.

The entrance fee to the drive is on the honor system. The drive is dotted with informational signs, pull-offs, boardwalks leading from the roadside out over the marsh, and an observation tower. The drive is lined with mangroves. Their fascinating arched root systems filter salt from the water, allowing the trees to thrive. Over time they form estuaries, and develop entire areas of land.

The sanctuary was established in 1945 as the Sanibel National Wildlife Refuge. In 1967 it was renamed for J.N. "Ding" Darling, a two-time Pulitzer Prize winning political and editorial cartoonist who also designed the first duck stamp. Darling was long involved in conservation. In 1934 he initiated the Migratory Bird Hunting stamp program, and every year since then a new stamp has been issued. Through their sale more than $550 million has been raised to purchase waterfowl wetlands for about 200 refuges.

Today the Sanibel refuge is one of almost 500 throughout the United States that are administered by the U.S. Fish and Wildlife Service.

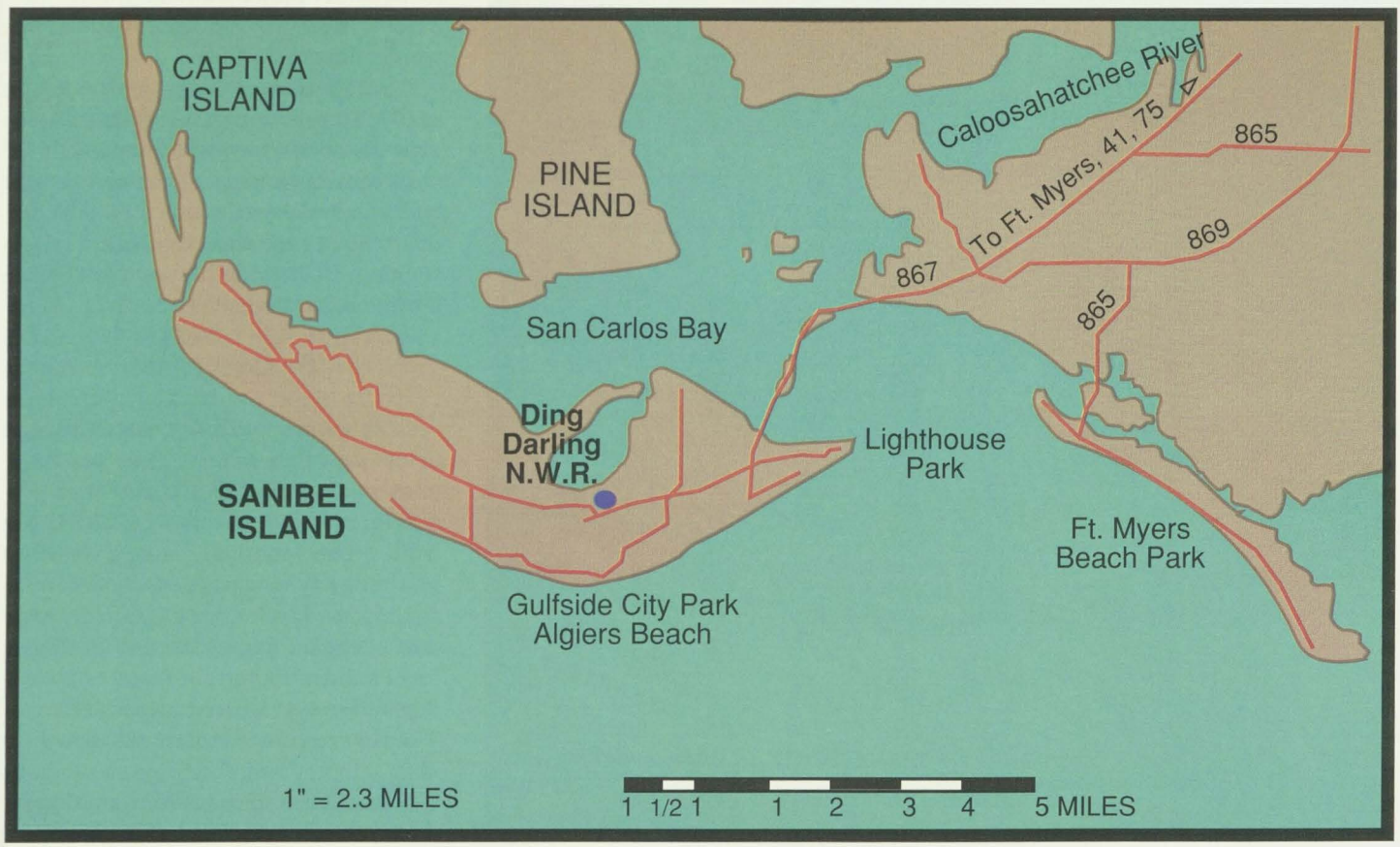
The refuge is open 9-5 November through April, and 9-4 May through October. It is closed on Fridays. The visitor's center offers a 15-minute orientation film, as well as maps, brochures, exhibits and volunteers to answer any questions. Private operators also offer interpretive tram tours, canoe rentals and naturalist-led tours.

Designated foot trails include the 0.3-mile Shell Mound Trail, 2-mile Indigo Trail and 1.75 miles of trails at the nearby Bailey Tract. Insect repellent is essential here.

Tom and Joanne O'Toole are freelance outdoor journalists based in northeast Ohio.

CHARLIE HEIDECKER

Photographers at a wading bird feeding frenzy, "Ding" Darling National Wildlife Refuge.



Hunting From a Deer's Level

By Mark Fisher

TED ROSE

So you usually hunt deer from a tree stand. Remember the hours you've spent in the stand when the most interesting sight was that of a woodpecker's underside as it drilled into your tree's trunk?

Choosing one particular tree to hunt from puts you at the mercy of the traveling whims of a game animal with a reputation for bypassing hunters more often than walking up to them. Days spent in a stand without seeing a deer can convince you that you've been hunting in the only place in the woods where the deer are not.

Still hunting, however, lets you match your skills against the whitetail's natural evasiveness. Besides not having to worry about staying awake, you'll cover more hunting area, gain a better understanding of deer behavior, and often see more deer. Still hunting also gives you the opportunity to determine your position in relation to the target rather than being stuck in a tree wishing for the mobility that would allow a shot.

But those advantages don't come easily. The success of a still hunt depends upon observation and awareness. Sure, a slow pace, knowledge of terrain, appropriate equipment and other factors are important when stalking. But being observant and aware are paramount.

Be Observant

Some people find it easier to detect deer than others. They are the ones who are first to discover a quarter on the sidewalk or a faked hand-off at a football game. Even if you're the type who needs help finding the ketchup in the refrigerator, don't despair. Seeing deer at ground level amidst the terrain features and vegetation types is not impossible. The first step is to realize what you should be looking for.

Search for deer parts or anything that seems out of place. Look for deer

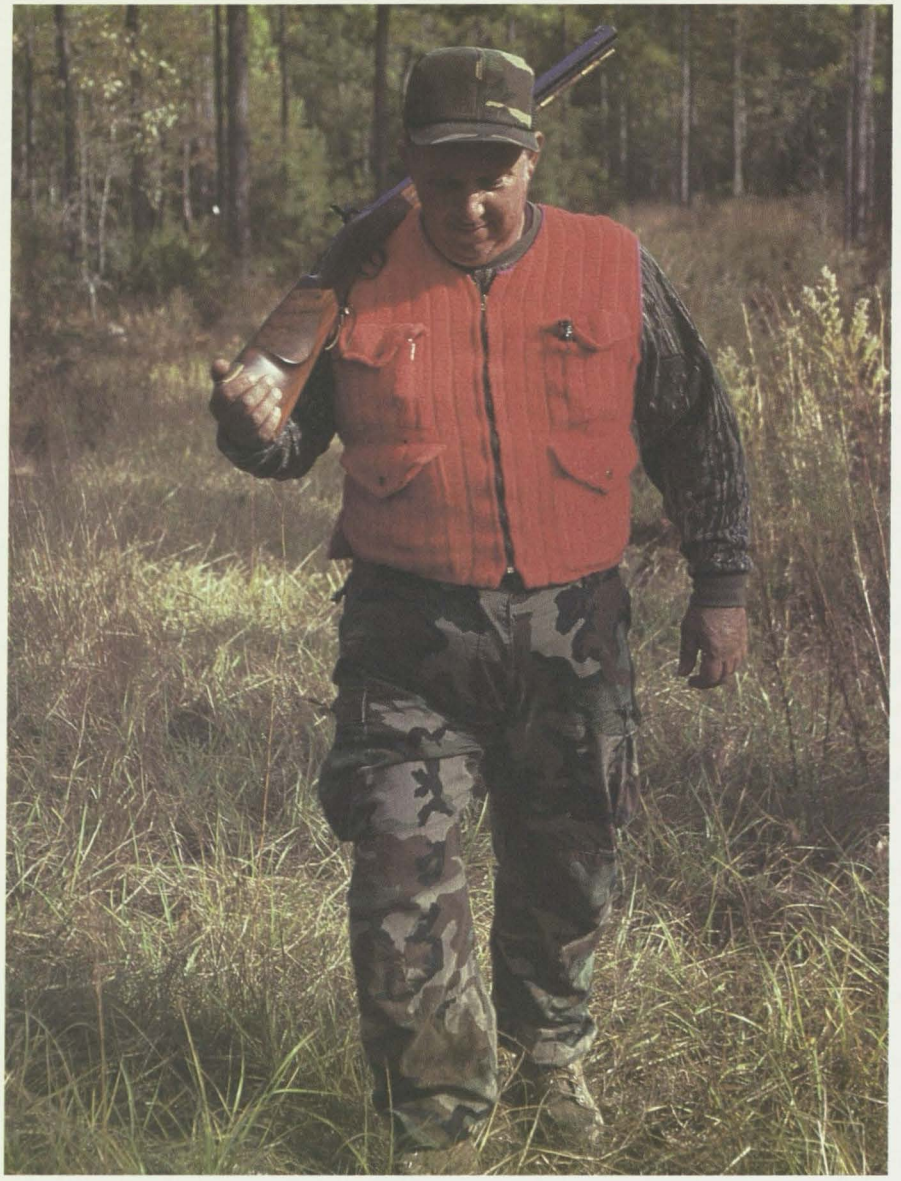
colors among terrain and vegetation colors; look for antlers or ears amidst branches; look for shiny black eyes or noses within dull grass or brush; look for a horizontal back in vertical trees. A pair of binoculars or a handy monocular will help you determine whether something that doesn't look quite right is a deer. Also, don't depend on motion or noise to tip you off. If you're close enough to a buck to see it, it's probably suspicious and therefore motionless and alert. Your powers of observation will put meat in the freezer or perhaps a trophy head on the wall. But in the deer's case, observation means survival.

To avoid detection by deer, begin with personal camouflage, keeping in mind that wearing a minimum of 500 square inches of daylight florescent orange material is required when hunting on public lands in Florida. Match the camo pattern to your hunting area. For example, while bark camo works well in a tree stand or in thick woods, a green leaf camo may be more appropriate in earlier archery seasons when vegetation is still lush.

Your equipment should be camouflaged as well. Not only should your gun or bow have a camo finish or camo cover, but all shiny surfaces need to be dulled or covered. Take off your watch, glasses, and rings if they reflect light. Look at painted objects like rifle scopes or bow stabilizers and see if any scratches have revealed bright metal beneath–touch them up or place camo tape over them.

Exposed skin will also stand out when stalking deer on their own level. Camo face paint is often a better solution than head nets, which can interfere with vision. Apply paint to your hands as well, or wear lightweight gloves.

Your route can also help hide you from deer. Stick to the shade and shun patches of sunlight. When possible, use vegetation and terrain to mask your presence. Walk behind bushes, from tree to tree, and within the wood lines. Don't walk through clearings; deer often linger just within tree lines keeping an eye on those open areas. Walking in a shallow gully will keep the lower portion of your body out of sight.



STAN KIRKLAND

Be Aware

Awareness is the second essential element you must bring along on a still hunt. In general, you need to be aware of the weather conditions, wind direction, your route, the terrain and likely deer activity.

Weather influences both how quietly you'll be able to stalk and where you should stalk. Rain dampens leaves to allow relatively silent progress while dry ones are prohibitively noisy. Falling rain and blowing wind will mask your sounds. You also need to be aware of the wind direction and try to stalk with the wind in your face so your scent won't precede you.

A recent or falling drizzle will allow you to still hunt on a floor of fallen leaves, and your start and stop points can be determined by learning of forecast wind direction. A heavy rain, high winds or approaching storm will help you eliminate fair weather deer areas and concentrate on tight sheltered spots such as stands of pines or swamps. ▷

When planning your still hunting strategy, you need to anticipate what the deer are likely to be doing during your hunt. Will they be tending scrapes, chasing does, feeding, traveling, sleeping? Of course, you need to be flexible – deer are never 100 percent predictable, but you must have an idea of what to expect based on past experience, pre-season scouting, the time of year, hunting pressure and other relevant factors.

Remember, still hunting is not for flushing deer out of cover like a rabbit. A ground-level shot at a running deer is rarely advisable with a gun and never with a bow and arrow. Once you see a deer, consider its location and determine if you'll need a better angle, closer distance or clear shooting lane to get a good shot. Although the best situation is to let the deer move within range or into an open land, you may have to act to get a shot.

Action doesn't necessarily mean moving. A number of calls on the market will often help bring a deer that isn't traveling to you closer. But always apply judgment when using a call. Rattling out of the rut can just make a deer suspicious, and a doe call out of rut may not interest a buck in the least. Try appealing to a deer's curiosity instead with a low buck grunt or soft fawn bleat.

When you raise your gun or draw your bow, do so slowly and silently when the deer is facing away. You're usually better off allowing the deer to walk away rather than letting it see and hear you. If you know of a crossing or funnel along the deer's direction of travel, you may be able to slip around and ambush it, but only if you don't spook it while trying to move.

The last thing to be aware of is you, how you sound and smell to deer. You can take precautions that will keep you from defeating yourself during a still hunt.

Minimize Noise

Culprits that produce noise while stalking are often loose items of equipment. Tuck them away, and be cautious when moving. Bow strings caught on branches will twang, and gun stocks bumped into tree trunks will thump. Carelessly laying your gear on the ground may cause a creak or clang. Be sure the contents of those packs are wrapped in a cloth or otherwise bound up so they can't rattle.

Secure the contents of your pockets the same way. Don't try to still hunt with a key ring with a dozen keys attached and two bucks worth of change jingling in your pants pockets. Leave everything that will make noise in your vehicle and just bring your door lock key with you.

Your choice of material in hunting clothes can further reduce noise. Soft fabrics like wool, chamois and polyester fleece are much quieter than stiff cotton (like denim) when brought through vegetation.

A whitetail's senses of sight, hearing and smell are better than yours. And it's more familiar with the habitat and terrain.

Your route and method of walking affect the extent you'll be able to minimize noise. Avoid heavy brush. Stay on quiet ground – moist leaves, bare trails, pine needles or grass, or in shallow creeks. Take a few steps, pause and observe, identify exactly where you'll take your next steps, and then proceed.

When walking, take a different number of steps each time to avoid a steady rhythm. Short steps will maintain sure footing and keep a stable center of balance. Short steps also allow you to gently place the ball of your foot first on the ground, which helps you avoid snapping twigs.

Your footwear can help you stalk more silently. Many veteran still hunters wear pliable nylon athletic shoes. Manufacturers are responding to this niche in hunting footwear by making athletic shoes and hiking boots in camo.

How You Smell

Being aware of how you smell will make you a more successful still hunter. Although the actual merits of cover and sex scents are still being hotly debated, you can't go wrong with the philosophy that no scent is the best scent. Shower with non-scented soap and/or baking soda and stay away from scented deodorants, anti-perspirants, after shave and the like. Don't hunt with fuel, tobacco or other human-related smells clinging to you.

Wash your hunting clothes in unscented detergent and hang them outside overnight to air out. Store hunting clothes and boots in a plastic bag with baking soda sprinkled inside. If possible, wait until you've arrived at your hunting destination to take your boots and clothes out of that bag and put them on so they won't become scent-contaminated during the trip. Keep food in sealed bags within your day pack. Stick to water when hunting, rather than bringing a beverage with a distinct odor.

A whitetail's senses of sight, hearing and smell are better than yours. It's more familiar with the habitat and terrain. But don't be reluctant to pursue it on its own turf. After all, why should your hunting success depend on whether or not a deer decides to stroll past your stand while you're in it? Crawl out of that tree and go after the deer on foot. It'll be more productive.

Mark Fisher is a free-lance writer from Missouri.

Halfway There

By DeLene Sholes

SUSAN MINK

We rounded a bend in the river, and a 4-foot gator slid off into the water within a few feet of us. We heard a clap of thunder in the distance. I glanced anxiously at my watch. It was almost 6:30 p.m. I thought about what the young man had said earlier about snakes. We paddled harder.

My husband and I were spending the weekend on the Suwannee River. Saturday we had put our canoe in at Griffis Fish Camp just two or three miles below the Okefenokee Swamp, where the Suwannee begins. Sunday's trip had started at Saturday's takeout point, Fargo, Ga. We planned to paddle the 21 miles to state Road 6 in Madison County, Fla., where we'd left our car that morning. When we got to the bridge, we would drive to Fargo, pick up our truck and trailer, and drive back to the bridge to get the canoe.

We wound our way through giant cypress and ancient tupelo trees. We paddled as quietly as we could, hoping to observe wildlife. As we rounded a bend in the river, we watched a female wood duck gather her babies and direct them to the safety of the shore.

We pulled up to a beautiful sandy beach after about an hour after we left Fargo, spread a towel, and drank Gatorade, appropriately. We had been moving along at a leisurely pace, relaxing and enjoying the scenery. I took out my notebook and pen and began a log of the trip. After a few minutes we started out again. I spotted a large gator, and focused the camera on him. When we got a little closer, I realized my gator was a rubber tire. ▷

We continued on, drifting, relaxing, filming. There were clues that the trip might take longer than we planned. We should have picked up on the fact that other groups broke the trip up into two days. A group from Atlanta, cooking hamburgers on the beach, waved and told us they were going to get to state Road 6 the next day.

After awhile we pulled over to the west bank and spread lunch under a tree. A truck drove up and a young man got out. We asked if this was his property, and he explained that it was his family's, but we were welcome to stay. We talked for a few minutes, and we asked him how far we were from the bridge. He estimated eight or nine miles, a little less than what we figured at that point. I think it was about 2 p.m. when we stopped there. We asked him about gators in that area, and he said there weren't any along there, but there were lots of snakes. He said snakes were all over the place.

We pushed on. The sun got hot, and I poured water on my head, shoulders and back. Occasionally a kingfisher would lead the way for us by leaving its perch as we approached, and flying 50 yards downstream to another perch. We caused many a sunning turtle to abandon its log and dive into the tannic water, to emerge again when we had passed.

"I hate to tell you but you're only halfway there. It's another 10 miles, at least three or four hours."

We came around a bend at about 4 p.m. and saw a family of four camping on the bank. The man and the children were bathing and swimming; the woman was getting dinner. She greeted us and asked where we were going. When we told her, she said, "I hate to tell you, but you're only about halfway there. It's another 10 miles, at least three or four hours."

We were tired. We didn't have a lot of water left. We'd thought we were making good time, and halfway expected to see the bridge around each bend. Not wanting to show that I was upset, I calmly said, "Oh, well, we've got another tin of sardines," and we paddled away.

When we got out of sight of the camp, we began to paddle furiously. We thought she was wrong, but it was 4 p.m., and we didn't want to take any chances on getting caught on the river after dark. We paddled hard for awhile. Then we met a couple who were fishing. They estimated 12 miles. We

D. BRUCE MEANS

SUSAN MINK

paddled harder. We met some anglers who estimated five miles. We pulled out our maps. We told each other it couldn't be more than a couple of miles. We met more fishermen. They estimated 10 miles. There was a loud clap of thunder. We looked up and saw a big thunderhead. We paddled harder.

After awhile the sun sank behind a big cloud. There were a few more loud claps of thunder, and a few sprinkles of rain, but nothing more. We were worried that we wouldn't get back before dark. I knew we had dry matches, so we could build a fire on the bank, but we didn't have much water left. We had one tin of sardines, one can of vienna sausage and crackers. There was ice in the cooler. I began to think of what we would do if it got dark. My husband was thinking the same thing, but we didn't talk about it until later. If we hit a stump in the dark, we could easily capsize, so it wouldn't be safe to try to keep going. We might not be able to see the bridge in the dark, and might go beyond it.

At dusk we passed two young couples camping on the east bank. We just knew at that point that the bridge was just around the next bend. We'd been paddling really hard. We asked the young people. They were giggling. They told us it was three or four hours to the bridge. We said that's about what we figured.

We saw the water swirling up ahead. Rapids! We'd never paddled through rapids. We paddled through these. We thought we had arrived at the bridge, because we knew there was a small shoal just above it. There was no bridge.

Then we saw columns, the remains of an old, fallen span across the Suwannee. Maybe the new bridge, the one we were looking for, was coming up. My husband saw it first. We could see it around a bend, then we couldn't see it, then we saw it again. At last!

A young man and woman were fishing on the bank. They helped us haul the boat up the steep bank, and offered to watch it while we went to get the truck. It was 7:40 p.m., almost dark. We had been on the river for nine hours and 40 minutes. It was quite dark by the time we returned with the truck.

We thanked the young people and left. We had made some serious mistakes in planning such a long trip for one day and not taking enough water, and we were happy to be heading home to our own warm, comfortable bed. Still, we both count that Suwannee float as one of the most pleasurable canoe trips we've taken.

DeLene Sholes is a school administrator in Walton County who loves the outdoors.

Winter Chorus

Text and Photographs by John Palis

As a child with an inexplicable interest in herpetology, it wasn't easy being raised in the Midwest. There, the long, cold winters drive amphibians and reptiles deep underground, and out of reach, for half a year. By early March, it seemed as if the spring thaw would never come. Finally, sometimes in late March but usually not until April, I heard their voices raised in praise of longer days and rising temperatures. Minute troubadours rejoicing with all the fervor of a revival choir. Beginning with one or two, here and there, they soon gathered and caroled by the hundreds, filling small pools, ponds and ditches with their message – spring has finally arrived!

Imagine my surprise when, upon moving south, I heard these harbingers of a Yankee spring calling in the late fall and throughout the winter. Enchantment soon replaced bewilderment – the South's protracted spring kept these familiar voices in my ear all winter long, reminding me that herps are never out of reach in Florida. There are 10 members of Florida's "spring" frog choir, four of which breed almost exclusively during the winter months, and six of which breed nearly any time of the year.

All of these you may hear calling now.

The **spring peeper** is readily identified by the distinctive X-shaped mark on the back. Its call is a series of high-pitched whistles which rise slightly at the end – *peep, peep, peep* – issued at a rate of one per second. Choruses can be heard in small woodland ponds from late November through early April. Spring peepers inhabit hardwood bottoms of north Florida as far south as Orange County.

Southern chorus frogs inhabit mesic pine woodlands throughout the state. The voice is similar to the sound made by slowly running a thumb over the large teeth of a comb – *tic, tic, tic.* In north Florida, the call is most often heard from late fall through the winter months, but in south Florida calling can occur all year long. Southern chorus frogs breed in roadside ditches, flooded fields and small temporary ponds.

The **northern chorus frog** inhabits large river floodplains of the western Florida panhandle. Its voice is similar to that of the southern chorus frog, only much faster. The call consists of a series of short trills – *prreep, prreep, prreep* – similar to the

Southern chorus frog (left) and spring peeper (above).

Southern cricket frog.

Ornate chorus frog.

Little grass frog.

sound made by running a thumb quickly over the small teeth of a comb. Habitat and voice best distinquish the northern chorus frog from the southern chorus frog. The northern chorus frog ranges far to the north, nearly to the Arctic Circle.

The boldly patterned **ornate chorus frog** inhabits pine woodlands of north Florida as far south as Lake County. Typically reddish-brown in color, some individuals are green or gray. The voice is a series of sharp notes, issued at a rate of 60-80 per minute – *dik, dik, dik*. Individual notes are similar to the sound of a hammer hitting a steel chisel. Calls can be heard from temporary ponds from November through March. Outside of the breeding season, the ornate chorus frog burrows head-first into sandy soil.

At $^{11}/_{16}$ of an inch long, the **little grass frog** is Florida's smallest frog and among the smallest in the world. The little grass frog compensates for its small stature with its high-pitched, tinkling, insect-like call – *set see, set see* – that some people are unable to hear. This inhabitant of mesic pinelands occurs throughout the peninsula and as far west as coastal Okaloosa County in the Panhandle. Little grass frogs can be heard calling from roadside ditches and temporary ponds all year.

prreep, prreep
gick, gick
aoww, aoww
rraak, rraak
peep, peep

The **southern cricket frog** is common throughout the state, inhabiting both temporary and permanent wetlands. Its call, which can be heard throughout the year, sounds like two glass marbles being struck together in rapid succession – *gick, gick, gick*.

The **northern cricket frog** occurs in large river floodplains in the western Panhandle. Its call is similar to that of the southern cricket frog, only more of ▷

a running trill. Positive identification of cricket frogs generally requires capturing the frog in question, not an easy task. These diminutive frogs take long, erratic leaps to avoid capture. The hindlimbs are shorter than the body in northern cricket frogs, and longer than the body in southern cricket frogs.

Eastern spadefoot toads live in burrows they dig in loose sandy soil of high pinelands and the oak hammocks in all but extreme southwestern Florida. Spadefoots can be stimulated to breed anytime of year by heavy rains, such as those associated with stationary fronts or tropical storms. The mournful call is similar to the second syllable in the meow of a siamese cat. Spadefoots typically breed in recently filled temporary wetlands that lack tadpoles of other frog species.

Like southern cricket frogs, **southern leopard frogs** occur statewide and inhabit wetlands of all kinds, including slightly brackish coastal marshes. The call, which can be heard year-round, can sound like a series of chuckles, or like the sound produced by rubbing a thumb over an inflated balloon.

The **gopher frog's** habit of taking shelter in subterranean burrows in xeric sandhills and scrub ranks it among Florida's most peculiar frogs. It is only during the breeding season that gopher frogs migrate to fish-free ponds to voice their presence with a low snore. In north Florida, gopher frogs generally breed only during the winter months, but can be stimulated to call as early as September following tropical storms or hurricanes. In south Florida, gopher frogs call most often in May and June, in response to heavy rains. Because the upland habitat of gopher frogs is also a favorite of humans, gopher frogs are becoming increasingly rare in Florida.

Who among us isn't impressed by the dedicated birder who, upon listening to but a brief discourse of a bird hidden amid dense foliage, identifies it based solely on the bird's song? Knowledge of bird calls used to require lengthy field study – tracking calling birds until a positive visual identification could connect sound with sight. Today, birdwatchers can expedite the learning process by acquiring and studying pre-recorded tapes of bird calls. Fortunately for frog watchers, tapes are now available of frog calls, as well. The capability to identify frogs by voice greatly enhances our ability to determine which frogs live where and when they are active. It's a simple, inexpensive means of keeping tabs on our amphibian neighbors. Those wishing to enhance their ability to identify by voice Florida's 27 native frog species, including those 10 that call during the winter, are encouraged to acquire the tape, "The Calls of Frogs and Toads," which can be obtained from Lang Elliot at NatureSound Studio, P.O. Box 84, Ithaca, NY 14851.

John Palis is a vertebrate zoologist and nature writer/photographer who now lives in Indiana.

Gopher frog (above) and Southern leopard frog (right).

1995 Wild Florida Calendar

January

- Use cut Christmas trees to start brush pile near feeders to provide cover for birds.
- Breeding and nesting by ospreys, roseate spoonbills, sandhill cranes, hawks and owls.
- Deer reach the peak of the rutting season in north Florida.
- Great time to watch over-wintering ducks and geese.
- Black crappie fishing in full swing in northern part of Lake Okeechobee.
- Clouds of tree swallows roost at sunset over large marsh systems.
- First Carolina yellow jessamine blooms in central Florida woods.

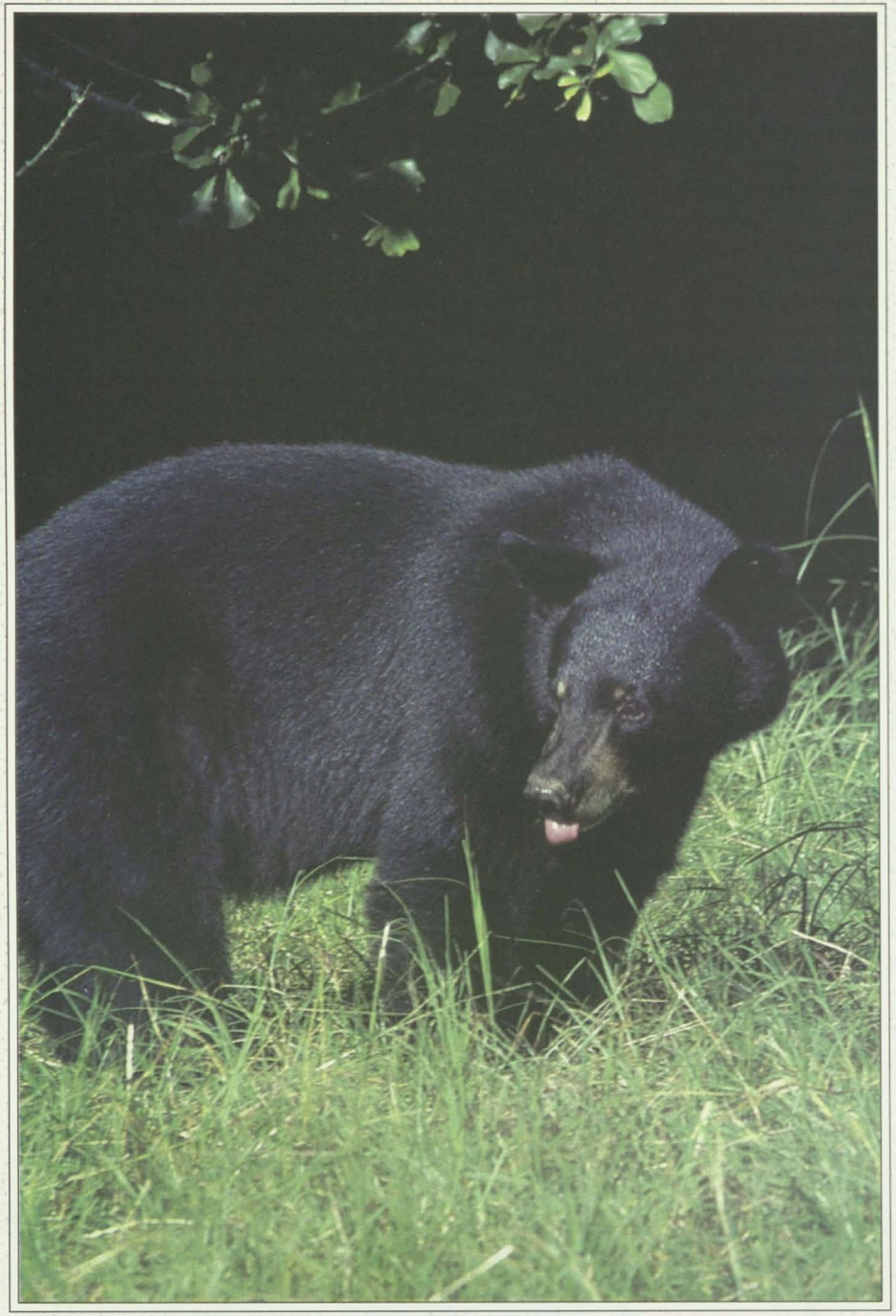
February

- Early purple martin scouts appear in Florida: raise houses or gourds now.
- Start looking for trilliums and dogtooth violets in Panhandle ravines.
- American shad spawning run peaks in the St. Johns River mid-month.
- Screech owls begin nesting in central Florida.
- Wild turkeys and quail begin breeding in south Florida.
- Bald cypress trees leaf out in Big Cypress Swamp.
- Alligator snapping turtles begin mating, followed by nesting throughout the spring.
- Top month for trophy largemouth bass in Lake Jackson, Leon County.

March

- Swallow-tailed kites return to south Florida wetlands.
- Wild azaleas bloom in profusion in rich woodlands.
- Male frogs and toads move to ponds, streams or ditches to breed during rainy nights.
- Gulf of Mexico sturgeon spawn in Suwannee River during spring or early summer.
- Mourning doves nest now through November.
- Largemouth bass spawning throughout central Florida.
- Hang a gourd or open basket under your eaves for nesting Carolina wrens.
- Lake Kissimmee shellcrackers bed on the full moon.
- Look for red foxes emerging from remote beaches.
- Wild turkeys and quail begin breeding in central and north Florida.
- First mangrove cuckoos return to the Keys.
- Plant columbine, coral bean and other wildflowers to attract hummingbirds.
- Summer tanagers and great-crested flycatchers arrive to breed.
- White bass run up the Ochlockonee River above Lake Talquin.
- Listen for newly-returned chuck-will's-widows calling after sunset.
- Bromeliads start to flower in south Florida swamps.
- Migrating birds, in full breeding plumage, begin to return in waves each week.

CHARLIE HEIDECKER



BARRY MANSELL

April

- Black bears begin moving about after winter's inactivity.
- Most Florida snakes begin mating rituals.
- Beginning of sea turtle nesting season on Florida beaches.
- Endangered gray bats return to north Florida caves to raise young.
- Sooty terns take over Dry Tortugas for nesting.
- Bobwhite quail nest now through September.
- Largemouth bass move into shallow water in Lake Talquin.
- Long-tailed weasels, minks and river otters will be born April through May.
- Migrant warblers concentrate on coasts after cold fronts.
- Plant extra parsley for black swallowtail butterfly larvae to eat.
- Pitcher plant bogs in full bloom in Blackwater River State Forest and Apalachicola National Forest.
- Watch for hummingbirds feeding on blooms of columbine, buckeye and others.

May

- Peak flight month for Schaus' swallowtail butterfly in the Keys.
- White swamp lilies dot wet prairies and sloughs of the Everglades.
- First of month, height of crocodile nesting in the Keys.
- Courtship ritual of adult alligators begins, noted by the loud and resounding bellows of the males. Goes through June.
- Flathead catfish congregate below Jim Woodruff Dam, Apalachicola River.
- Gray bats congregate at maternity caves now through mid-July.
- Last of month, rosebud orchids begin blooming in north Florida pine flatwoods.
- Last cedar waxwings and goldfinches head for northern breeding grounds.
- Least terns and snowy plovers nest on beaches and sandy flats of Panhandle.
- Loggerhead sea turtles begin nesting on summer nights.
- Painted buntings nest through summer in northeast Florida.
- Bluegill begin to bed on full moon in Lake Tohopekaliga.

June

- Laughing gulls and black skimmers hatching young on coastal beaches.
- Tarflowers blooming in flatwoods signal beginning of summer.
- Height of gopher tortoise breeding season.
- American lotus blooming at Paynes Prairie State Preserve.
- Red bats and Seminole bats are born.
- Beargrass puts up blooming spikes in June.
- Southern flying squirrels will breed during June and July.
- Peak month for wildfires, which rejuvenate many Florida plant communities.
- Birds fatten on the bounty of summer vegetation.
- Cicadas emerge from 17-year growth period underground and begin song of summer.

July

- Peak of sea oat flowering on Atlantic beaches.
- Shorebird migration starts mid-July and peaks mid-August.
- Scrub morning glory and butterfly weed bloom in July.
- Through Aug., non-nesting shorebirds pause in Florida to recharge.
- Bluegill fishing excellent on full moon in Lake Marion (Osceola County).
- Mosquitoes and chiggers abundant.
- Swallow-tailed kites begin gathering in communal night roosts before migrating.
- Deer breeding through August in Everglades.
- Purple martins and tree swallows begin to gather to migrate south for the winter.
- Watch for magnificent frigate birds flying overhead in south Florida.

August

- Clean bird baths regularly; keep fresh water available for thirsty guests.
- Black bear cubs will wean from their mothers.
- Maturation of gopher apples, which provide food for a wide variety of wildlife including, of course, gopher tortoises.
- Short-tailed shrews will begin a second round of breeding for the year.
- Thousands of great southern white butterflies migrating through coastal areas.
- Good catches of channel and white catfish in tailrace of the Rodman dam.
- First flocks of blue-winged teal arrive to winter on Florida lakes and wetlands.
- Yellow warbler migration begins.
- Young sea turtles hatch and flee to the sea during summer months.
- Migrating shorebirds assemble and feed on Zellwood muck farms.

September

- Hawk migration begins at St. Joseph Peninsula in Gulf County.
- Peacock bass fishing good in Dade and Broward county canals.
- Peak of hurricane season – watch for strange sightings of wildlife, especially unusual birds following tropical storms.
- Peak blooming period for water-spider orchid in central Florida.
- Blue crabs migrate from the shallow Panhandle coast to deeper water for the winter.
- Deer breeding begins in south Florida flatwoods.
- Bald eagles return to nest sites and begin courtship.
- Gray bats migrate to Alabama caves for winter hibernation.
- Get your bird feeders ready.
- Start looking for manatees concentrated in rivers, bays and near power plants.
- Plant perennials that feed wildlife. Beautyberry is a native shrub easily grown.
- Atlantic sturgeon begin fall migration from Jim Woodruff Dam on Apalachicola River to Gulf of Mexico.
- First signs of leaves changing color.
- Blue crab "jubilee" begins along Panhandle beaches.

MARC EPSTEIN

KEVIN BARRY

October

- Early Oct. is peak migration time for warblers.
- Flatwoods salamanders breed with the first rains of October.
- Monarch butterfly migration nears its peak along Florida's Gulf Coast.
- Excellent wade fishing for largemouth bass using topwater lures in Lake George.
- Watch for large numbers of birds of prey on the southeast Florida coast.
- Flying squirrels move into pecan groves as nuts ripen.
- All migration of great sandhill cranes into Florida begins.
- Turkey vultures return to Miami courthouse.
- Plant berry-producing trees and shrubs for wildlife: holly, dogwood and beautyberry are good choices.
- Peak chimney swift migrations in south Florida.
- Look for migrating peregrine falcons at natural areas in northeast Florida.

November

- Set up winter seed and suet feeders for birds.
- Cedar waxwings come south for the winter.
- Peak of deer rutting in central and north Florida.
- Florida manatees migrate to warm waters of springs during winter months.
- Time to plant shade trees: choose native species with wildlife food and cover value including oak, hackberry and tupelo.
- Ornate chorus frogs begin calling.
- Look for downy, hairy, red-bellied and red-headed woodpeckers on suet feeders.
- Striped and sunshine bass leave thermal refuges in St. Johns River and congregate around jetties in south end of Lake George.

December

- Snail kites gather in large south Florida roosts. Nesting activity begins.
- Best month for waterfowl watching on wetlands, lakes and prairies.
- Great horned owls and barred owls courting. Listen for them.
- Buy live Christmas tree for later planting – red cedar, holly and pine are nice.
- Oscars abundant in Everglades Water Conservation Area canals, taking worms, crickets and beetle spins.
- Watch for goldfinches at north Florida feeders.
- About Christmas Day, bald eagles start hatching in north Florida.
- Christmas Bird Count begins mid-month. Sign up to help.

Thanks to Susan Cerulean for compilation of information in this outdoor calendar, as well as to Janisse Ray, Frank Smith, Scott Hardin, Mike Brooks, Dave Cook, Ann Morrow and Jim Cox. Design by Peggy Perkerson.

Clash of the Fire Ants

By Janisse Ray

Since the fire ant sailed into the Mobile, Ala. harbor from Brazil some 50 years ago, it has marched across the South, conquering as it goes. Throughout the '60s and '70s, responding to an up-in-arms public, eradication programs poured millions of dollars of poison across the Southern landscape, without avail, while biologists in reconnaissance diligently studied the ways of the ant. Now, the imported fire ant has spread northward through Georgia, Alabama and Tennessee, westward to central Texas and up the Atlantic coast to southern Virginia. The fire ant, all agree, is here to stay.

Meanwhile, scientists are finding that the insect is as war-like as we humans who have tried to oust it from our soil. ▷

The pasture is spread like a piece of velvet under the lifting sun. When you look east, slightly uphill, you see the plush of it, the grass darkened by spear-like shadows of short blades. From the direction the sun strikes, a sheen of grasses is laid out in green and yellow, shining.

Below the grass, hundreds of colonies of fire ants are foraging. Their mounds, some circled by knee-high plastic flags, dot the 35-acre field. Twelve hundred colonies of fire ants have been pinpointed in just one section of the field, where fire ants arrived around 1963. That means some 5,000 imported fire ant colonies exist on these 35 acres: the scope is staggering.

It's July and Walter Tschinkel, Ph.D., a biology professor at Florida State University, is sitting under the hatch of his car at the edge of the pasture, tamping tuna into test tubes. Fire ants love tuna.

Tschinkel, a ruddy-skinned man wearing shorts and a straw hat, has followed the imported fire ant for 25 years. He's studied the growth rate of their colonies, their distribution, the longevity of their queens. Now he wants to understand fire ant territoriality.

This test field is inhabited by imported fire ants that are very tribal in nature, with strict territorial boundaries. Invisible political lines are drawn across the field. At the edges of colony boundaries, continuous skirmishes are going on.

This aggression between colonies is what Tschinkel uses to determine sizes and shapes of territories. "For a fire ant, any contact with workers from other existing colonies can mean death," Tschinkel said.

He chooses an unmapped mound, and begins laying out baited test tubes in spokes radiating out from the mound, eight of them in the directions of the compass. North, northeast, east, southeast, and so on. It's like a Druid ritual.

He sets the tubes a couple of yards apart and covers them with a 4-inch-square wooden disk, like a piece of thin-sliced bread, and drops another into the mound itself. Then he waits.

Tschinkel's partner in this study has been working across the field. We hike to him. Eldridge Adams is a young, earnest man, a new professor at the University of Rochester. As we stand together, the sun inches higher above the pasture, and the early morning coolness begins to retreat.

"It looks very quiet here, but actually the colonies are in constant struggle against each other," Adams says.

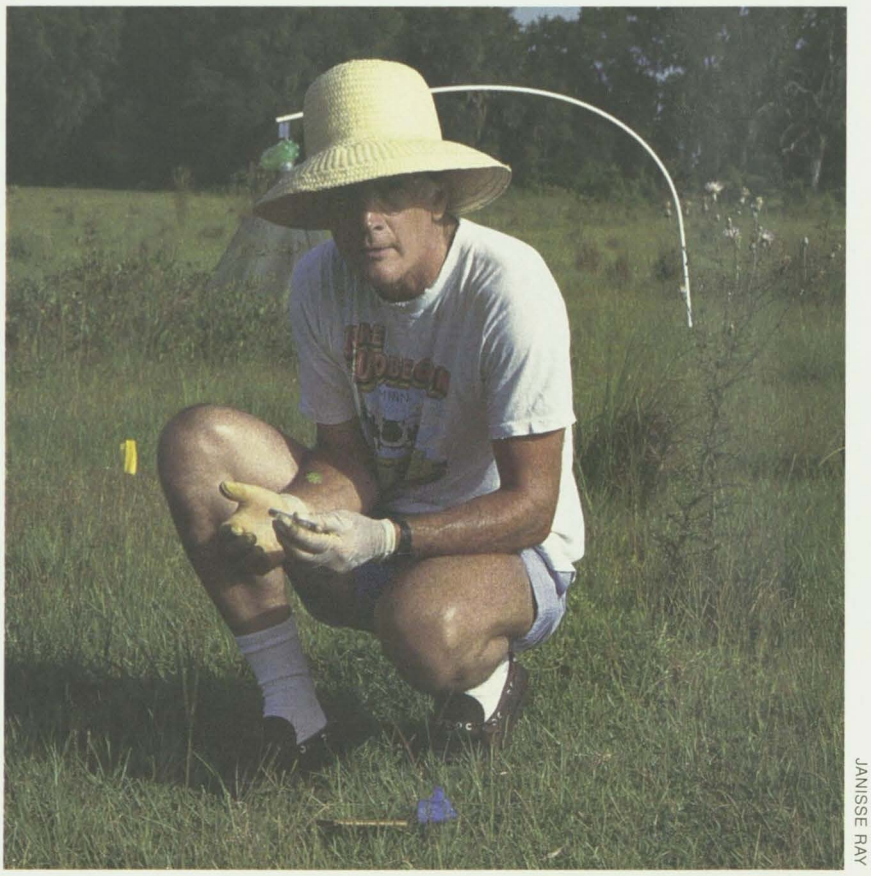
"It's quiet just to us humans," Walter echoes, quietly.

They show me an already-mapped territory. It's odd-shaped, the kind of random configuration you get if you break an egg into a pan. The mound is the yolk, not necessarily the center. A line of blue flags marks the inside perimeter of the colony. Beyond that there's a trough, a no-ant's-land. In these tiny strips, unharmed, live native species of ants that are known to decrease in abundance as imported fire ants move into an area. A line of red markers begins the territory of other ants.

Back at our colony, Tschinkel starts at the hub, picks up the test tube there, and heads down the southern spoke. At the first test tube out, the one closest to the mound, ants are feeding in shiny red-brown clots on the tuna. Wearing latex gloves, Tschinkel puts the open ends of the test tubes together and peers into the glass entrapment at scurrying ants. No aggression. I pierce the spot with a yellow flag. We're still on friendly ground.

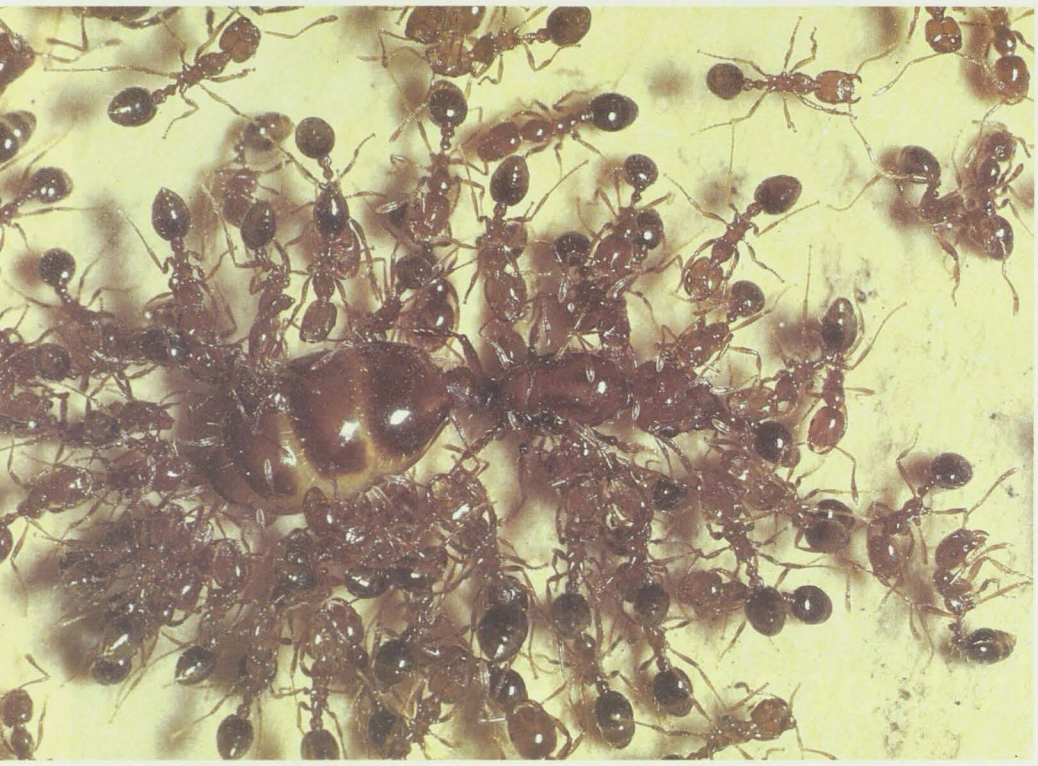
We move south, down the spoke, and test ants in the first and second test tubes. No signs of aggression. None between the second and third. Tschinkel connects test tubes from the third and fourth mounds, occasionally flicking fire ants from his hands.

I watch the near-tenderness with



JANISSE RAY

Walter Tschinkel, Ph.D. is studying the warlike behavior of imported fire ants.



WALTER TSCHINKEL

Above, an imported fire ant queen (center) surrounded by workers. Below, a fire ant researcher squats near the mound in a large fire ant territory, delineated by yellow markers.

which Tschinkel handles the ants, with their biocidic stings, accused of mortality among hatchling birds and sea turtles. How many times have I blundered into their painful nests.

"There's an awful lot of irrationality in the attitude toward, and hatred of, fire ants," Tschinkel tells me. "It's just another creature trying to make a living." I'm dubious.

"Come on, girls," he says aloud to the insects. Then he sees one ant seize another by the waist. Sure enough, another pair start to tussle. Then two more. Aggression. "Yes!" Tschinkel says.

I stick a yellow flag at three, a blue flag at four. Somewhere in between is the no-ant-zone, where neighbors do not venture and hostility begins.

This is ant war, I am thinking, the politics of fire ants. I cannot help but be reminded of humans, our own territoriality, how we fight among ourselves.

"War is a fact of life," Tschinkel answers, "in human society and in ant society. War is a tool of competition. We may cooperate but we also compete. It's true in ants and it's true in humans."

WALTER TSCHINKEL

Knowing that makes me feel more tolerant of them somehow.

Tschinkel goes around and around the mound, testing tube against tube.

"So this is in," he says. It comes to a matter of in or out, these or theirs. Slowly the territory takes shape. It's very large and oblong, and its extreme dimensions make Tschinkel nervous. He adds a few bait tubes to one end, and a couple more between a wide gap, trying to firm up the boundaries.

It turns out that not all fire ants are territorial. Some years ago scientists discovered the existence of multiple-queen (called polygyne) colonies of fire ants, as opposed to the typical single-queen, or monogyne, colonies, like the ones in this field. Because the polygyne mounds are interrelated through the kinship of their queens, these colonies are not territorial. These ants spread madly across an area.

But in monogyne colonies, this territoriality helps keep the ants in check. When a new queen lands after her mating flight, the size of her future colony is limited by the site she chose while airborne. If her neighbors are powerful, she will hold less territory. Relocating is hardly an option, since it requires movement through enemy territory.

Tschinkel's mission is to map all the mounds in this study plot, to discover how their continent is divided.

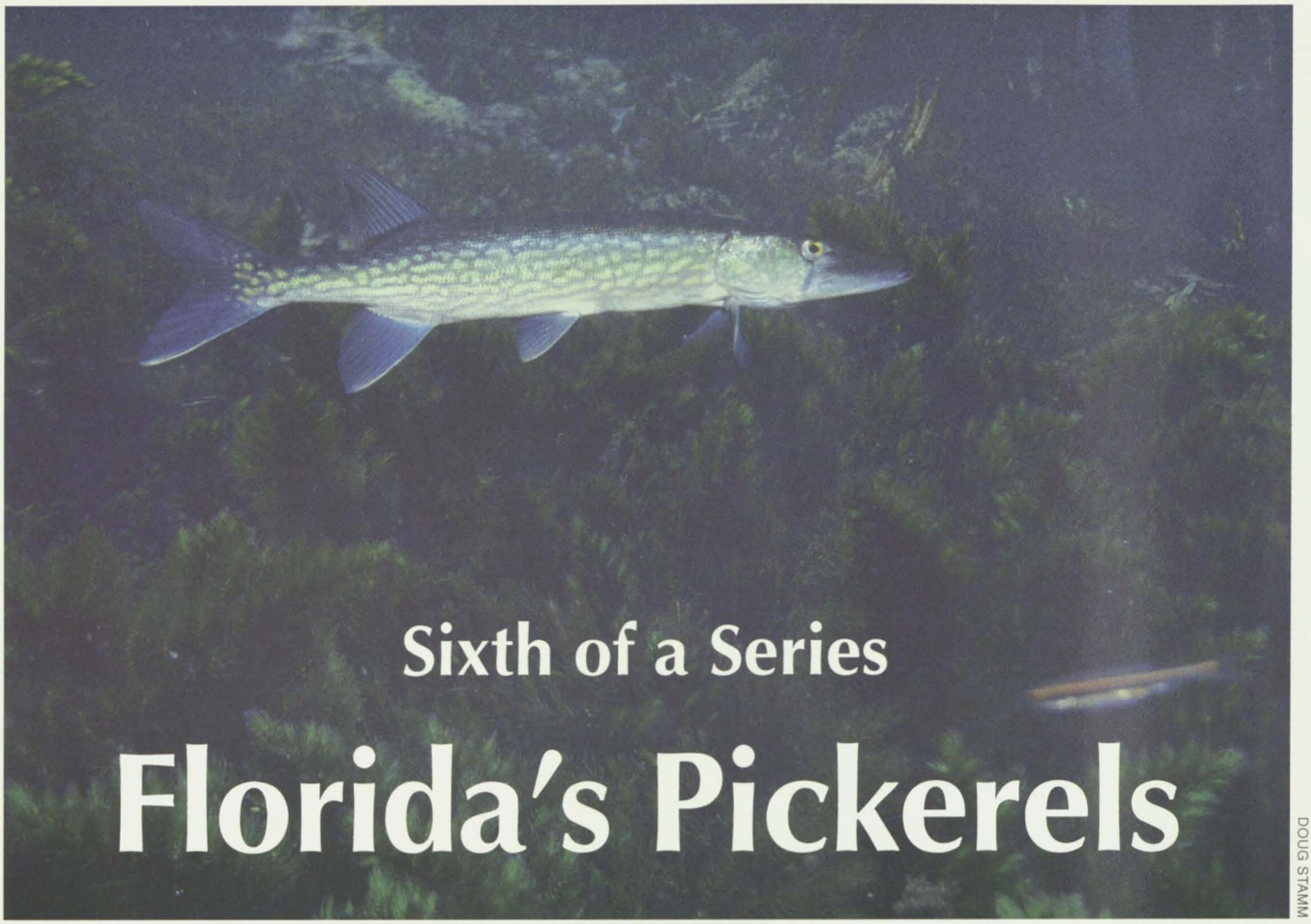
"Kill, kill," I hear him mutter. "That's what I like. It's starting to look more reasonable." He turns to me. "OK, so you're beginning to see the shape of this territory. It's long and narrow."

"You're a geographer," I reply. "An ant geographer."

With a meter-measure, I help him record the dimensions of the territory, from the mound out. We collect all the test tubes, refill them, bait another mound, and wait.

Looking down, I notice clover growing – one with a creamy flower so tiny that I realize I am thinking in miniature. Ant-sized flower. Some sedges. Yellow clover. I look up. Thistles grow tall, and butterflies flutter among them. A cow in an adjoining field lows. Crickets sound. A hint of wind surfaces, then all is quiet.

Janisse Ray is associate editor of FLORIDA WILDLIFE Magazine.



Sixth of a Series

Florida's Pickerels

DOUG STAMM

By Mark A. Trainor
Illustrated by Duane Raver Jr.

Pickerels found in Florida waters are true pikes, as distinguished from the species known as "wall-eyed pikes" in many other states, which are really members of the perch family.

Two species of pickerel are found throughout Florida – chain pickerel and redfin pickerel. Both are members of the family Esocidae.

Pickerels are easily recognized by their elongated bodies, snouts shaped like ducks' bills, large, needle-sharp teeth, and dorsal and anal fins set well to the rear of the body.

Pickerels are random spawners rather than nest builders. They scatter their adhesive eggs in the shallows, then abandon them. The fry, which must fend for themselves, soon develop carnivorous habits and begin cannibalizing other fry about three to four weeks after hatching.

CHAIN PICKEREL

Common Names – Pike, river pike, grass pike, jack, jackfish, eastern pickerel, chainsides, mud pickerel, black chain pike, duck-billed pike.

Description – The chain pickerel is usually a deep olive green on the back, shading to a creamy yellow on the belly. Olive green blotches are present overall, with distinct black chain-like or interwoven markings on the sides. The cheek and gill covers are completely overlaid by scales. The underside of the lower jaw has 14-16 branchiostegal rays.

Subspecies – None recognized. They may hybridize readily with redfin pickerel, however.

Range – Found statewide.

Habitat – Normally found in vegetated lakes, swamps, backwaters and quiet pools of creeks, and small to medium rivers. They prefer water temperatures from 75 to 80 degrees.

Spawning Habits – Spawning occurs in late winter to spring among heavy aquatic weed growth or flooded grasses, in water from a few inches to several feet deep.

Feeding Habits – The chain pickerel's diet is mainly fish. They also eat insects, frogs, mice, crayfish and a wide variety of other foods.

Age and Growth – Sexual maturity is reached in first to fourth year, and maximum life span is probably 8 to 9 years. Females grow faster than

Chain pickerel

males. In Florida, chain pickerel can reach lengths of up to 30 inches long.

Sporting Quality – Although not so common as the black bass, chain pickerels are often encountered by bass anglers, especially while plug casting. They are particularly good fighters on light tackle. Productive lures include spinner baits, weedless spoons, surface plugs, crankbaits and jigs. Minnows are a reliable year-round bait.

Eating Quality – The white, flaky meat is good tasting, but quite bony.

World Record – 9.38 pounds, caught in Guest Millpond, Georgia, in 1961.

State Record – 8.00 pounds, caught in Lake Talquin, Gadsden County, in 1971.

REDFIN PICKEREL

Common Names – Little pickerel, mud pickerel, grass pickerel, banded pickerel, redfinned pike.

Description – The redfin pickerel has 20 dark, wavy vertical bars, and reddish-orange lower fins. Otherwise the coloration is much the same as that of the chain pickerel. There is a distinct dark, vertical bar below the eye. The snout is shorter and broader than that of a chain pickerel. Normally there are 11 to 13 branchiostegal rays on the underside of the lower jaw. The cheek and gill covers are completely scaled.

Subspecies – Two are recognized: the redfin pickerel and the grass pickerel. Both subspecies hybridize with chain pickerel in the Florida Panhandle.

Range – Widely distributed in Florida but diminishes in numbers south of Lake Okeechobee.

Habitat – Usually found among heavy growths of aquatic plants in sluggish streams, in shallow coves of lakes or in ponds. They prefer water from 75 to 80 degrees.

Spawning Habits – Spawning occurs in the spring in shallow, weedy waters.

Feeding Habits – Small fish make up most of the diet, but they also eat aquatic insects and various other invertebrates.

Age and Growth – This species grows much more slowly than other members of the pike family. The maximum age is about 8 years, with the usual life span 7 to 8 years. There is little difference in growth between males and females, although females live longer. Redfin pickerel rarely exceed 12 inches in length.

Sporting Quality – These pickerel are scrappy fighters, but their small size limits their popularity as sport fish. They can be caught on minnows, streamers, small spinners, spoons and plugs.

Eating Quality – White, flaky, sweet-tasting meat, but quite bony.

World Record – 1.50 pounds, caught in Bluff Lake, South Carolina, in 1984.

State Record – 1.05 pounds, caught in Jr. Walton Pond, Okaloosa County, in 1986.

Mark A. Trainor is the public information specialist in the Commission's Tallahassee office who focuses on fishery issues.

Redfin pickerel

Scrappy "Splinters" Save The Day

When bass are not biting, chain pickerel can save the day!

Text and Photograph by Max Hunn

Our success had been nil in Orange Lake. Buck Bray and I had been fishing only a short time when the cold front came through earlier than predicted. The sudden drop in temperature had given the largemouth bass lockjaw.

It quickly had become spinner bait weather, and we'd been chunking safety-pin-type lures for several hours. Buck flipped a long cast into a pocket of the wooded shoreline, surrounded by weeds. His spinner bait had barely begun to move toward the boat when he had a solid strike.

"Got one!" he exclaimed with glee. "I'll boat this bigmouth if it's the last thing I do."

Suddenly the fish came catapulting out of the water like a miniature missile. "Oh, no!" he exclaimed. "It's not a bass. It's a pesky chain."

He had his hands full, bass or not. This was no panfish. The fish powered off on a line-consuming run, halted, then leaped into the air again. That's what I like about the splendid splinters (my name for the scrappy chain pickerel). Not only do they put up a good fight, they often take flight in the process. I have a weakness for leaping fish, and the splinters usually oblige.

Gradually Buck gained control, and after exhausting his fish, carefully grabbed it behind the gills for an unassisted landing. I was ready with the net, but I knew why he didn't want the net unless absolutely necessary. It's too much trouble to get a chain's chompers out of the mesh. Of course, if you're going to hand-land them, don't stick your thumb in their mouths.

Not only do they put up a good fight, they often take flight in the process.

Unhooking the chain, which probably weighed close to 3 pounds, Buck released it, and we resumed chunking our spinner baits for bass. No luck, but we caught seven more pickerel. Once again the splendid splinters saved the day, hitting when nothing else would.

Looking back at my fishing log, I see that chain pickerels have saved many a trip. Even in cold weather they'll hit, sometimes with reckless abandon. However, I doubt they get the respect they deserve as a fighting sportfish.

Too often, chain pickerels are taken with heavy tackle. Against a stout cane pole and heavy line, or 15- to 20-pound test bait-casting tackle, it can't perform. But meet a chain with light tackle, and you're guaranteed a battle.

Because it hits live bait with abandon, the chain is in poor repute with table fishermen looking for bass. Splinters either have gambling spirits, or like the thrill of the chase, for they like their meals moving fast. You seldom catch them with an artificial lure using the slow bass retrieve. However, they will hit live bait that is almost motionless.

If you're going to fish for them deliberately, you need to recognize pickerel waters. They love to lie on the edge of weed beds and charge at passing meals. They're always in ambush. It's not often that you catch them in deep water, nor very far from cover.

While they are speedy swimmers, and although they favor prey in motion, they don't like fast water, Nine out of 10 times, a grass bed near fast-moving water won't produce. However, a bed near sluggish but clean water usually will.

One thing in the pickerel's favor is

its willingness to hit artificial lures. Probably the top lure is a shiny, single-bladed spinner such as a Shyster, Abu, Mepps, Eppinger or similar. These lures require a fast retrieve. Weedless spoons also are very good, particularly with white, pork rind trailers. Chains also clobber spinner baits, fished fast.

Plugs work too, although not as often. The chains seem to like the Rebel/Rapala type, shallow-running lures. It's ghastly what they do to a plastic plug with their canines! When I'm fishing balsa-type lures, I don't want any part of the chain gang.

A pickerel's choppers are wicked. In the front of its mouth are small, closely packed "holding teeth." Studded along his jaws are sharp, strong erect fangs for seizing. This dental equipment should be enough for any standard fish, but not for a chain. Examine its mouth closely, and you'll notice three bands of backward-pointing teeth in the roof of its mouth that are mounted on flexible cartilage. Once it gets its meal (or your lure) into this part of its dental works, there's no backing it out. You need a good pair of long nosed pliers to remove embedded lures.

Color definitely is important in fishing for chains. Yellow is tops in clear water. Silver, too, is excellent, but drab colors usually don't produce, unless accompanied by a shiny spinner.

You can fight the toothpicks with very light line, 4- to 6-pound, but 8- to 10-pound is better, for you know sooner or later a chain will dive for grass. Then extremely light line is trouble. On the other hand, if your line is too heavy, you spoil the fight.

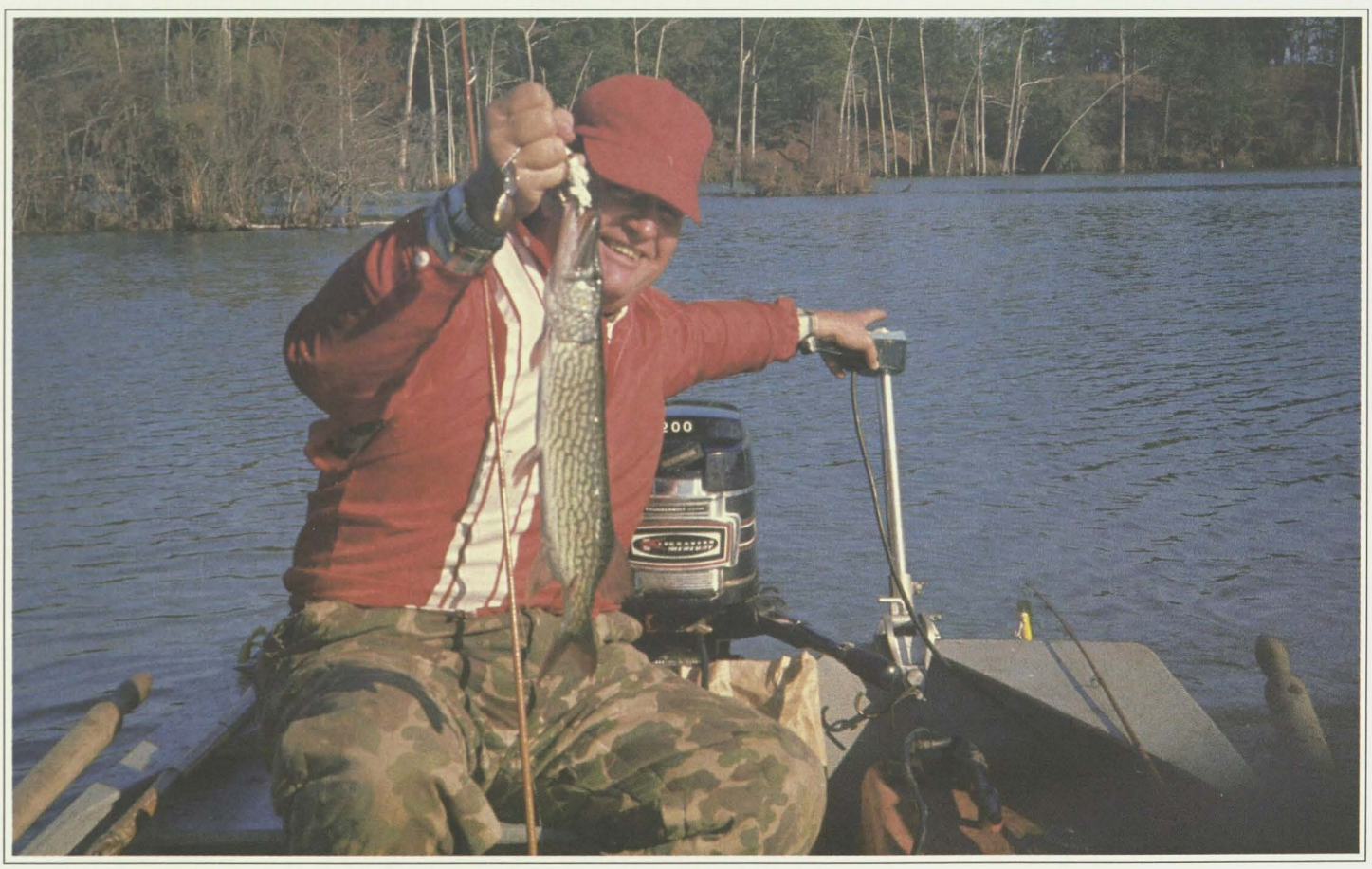
The best insurance is using a heavier shock leader such as 8 to 12 feet of 15-pound test mono on 8- to 10-pound main line. The heavier monofilament shock leader is partial insurance against a physical cutoff. Also it's some protection against his dentures.

Some anglers use light metal leaders, but these can reduce the number of strikes. Even if a pickerel charges like a demon, he's no fool. He seems to realize he shouldn't tangle with that contraption at the end of a piece of wire.

Pickerel also will hit fast-trolled lures near their hideouts. However, don't troll in deep water, and remember the lure should be light colored or shiny. One other factor: all lures should be small. A chain won't tackle anything too large for a meal.

Another feature about a pickerel is its willingness to hit all year around. I've caught them in the spring, in the summer, and when the north wind blows. The biggest chains seem to hit during the cold. Definitely a splinter is a splendid catch all year long.

Max Hunn has been a free-lance outdoors writer for 25 years.



Book Reviews

A Naturalist in Florida: A Celebration of Eden

Archie Carr. Yale University Press. Hardcover.

The snowy egret remembers mastodons.

White, fluffy from surplus plumage, and tiny, it stands its ground near a mechanical dredge many times its own size. As the larger form moves to and fro, the snowy hops in to exploit the spoils – wee, squirmy things up out of the mud.

If we dig deep into history, back to when Florida was covered with the fauna of the Pleistocene, giant creatures like bison and mastodon, moved across the wild terrain, poking and prodding. And right next to them were snowy egrets.

"You come upon a raging dragline with a wisp of snowy [egret] there, dodging the cast and drop of the bucket as if only mammoth tusks were swinging," writes Archie Carr, "and what can it be but a sign of lost days and lost hosts that the genes of the bird remember?"

And so goes the gentle and joyful perspective of *A Naturalist in Florida*, a collection of articles and essays written in Carr's lifetime, and gathered and edited by his widow, Marjorie. Unlike his other books, which focus on Central America, sea turtles and Africa, this collection deals solely with Florida. They are reaffirmations of life, seen through the eyes of a gifted Southern writer who never seemed to lose his boyhood wonder for all things natural.

Carr lived in Florida for over 50 years, first as an undergrad student at the University of Florida, and later as a research professor of zoology and renowned sea turtle expert. He also lived and traveled extensively in the tropics, sharing those experiences with us in *The Windward Road*, *High Jungles* and *Low* and *So Excellente a Fishe*, among others. In them he told wonderful tales that melded the sensitivity of the poet with the hard data of the scientist.

During Carr's earlier years, Florida was every bit the adventure that developing countries in the tropics are today. When he moved here with his family in the 1930s, the state was, as Marjorie points out in the preface, largely undescribed by biologists. Even as it became better known through the years and its wildness increasingly domesticated, Carr never lost his enthusiasm for the real Florida. Pondering how to approach a book with this theme, Carr once wrote: "...there was really no sense writing another vanishing Eden book at all. The way to get my point across would be to talk mostly about what joy still remains in the Florida landscape."

Carr concludes that a new system of ecological ethics has emerged to influence the developer-driven politics of the state. If there's ever any question about how such a natural ethic in Florida is pieced together – of how the mind is wedded to the heart – we have this fine legacy to show us the way.

– Bill Belleville

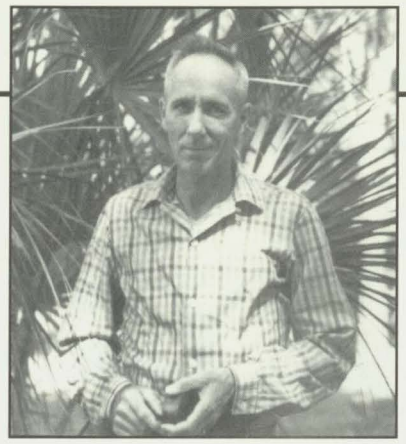
A Naturalist in Florida is available in most bookstores, $28.50 hardcover.

The Birdlife of Florida

Henry Stevenson, Ph.D. and Bruce Anderson. University Press of Florida. Hardcover.

Want to know how many eggs a yellow-throated vireo typically lays? Or how many observations exist for yellow-nosed albatross in Florida and where these were recorded?

The complexities of Florida birds are now a lot easier to grasp, thanks to the publication of *The Birdlife of Florida*, a book that presents the lifetime work of Dr. Henry Stevenson, one of Florida's most knowledgeable field ornithologists. Until Stevenson's death in 1991, noted a recent tribute, whenever a question came up about the distribution or rarity of a particular bird in Florida, the solution was to "Go ask Henry."



Archie Carr

Although we can no longer simply "Go ask Henry," *The Birdlife of Florida* provides access to Stevenson's vast collection of detailed Florida field notes, amassed over a period of almost 50 years. As such, *The Birdlife of Florida* provides important insights and information for a period when Florida metamorphosed from a quiet rural state with about 4 million people into the bustling, urban home of 14 million. The effects of this transformation can be seen on many pages.

The Birdlife of Florida is not a stocking stuffer. It is a comprehensive work spanning 907 pages, with 464 maps and an exhaustive bibliography that provides readers with references to recent literature on Florida birds. For each of the 500-plus species recorded in Florida, Stevenson and co-author Bruce Anderson prepared sections on distribution, Florida status, migration, breeding, population trend, and haunts and habits. The book synthesizes hundreds of hours of work conducted in the naphthalene aroma of bird museums from Miami to Tallahassee.

It is the most complete reference available on Florida birds and will be a welcome addition to the libraries of practicing ornithologists, active birders and natural history enthusiasts.

– Jim Cox

Florida Birdlife is available from University Press of Florida, 15 NW 15th Street, Gainesville, Florida, 32611-2079, $120 hardcover.

When to Rescue Baby Songbirds

By LeeAnn Pennington

Baby songbirds begin appearing in Florida from late winter through fall. We see them on the ground and think they need to be rescued. All too often, we are mistaken.

The only time a baby songbird needs to be rescued is when:

1. It has no or few feathers and is on the ground.

As long as baby birds are in the nest, they are probably just fine. You may not see the adults, but they are there. Even with only one parent, the young will be cared for.

2. It is obviously injured or has been brought to the house by a cat or dog.

3. Its tail is less than 1/2" in length and it can't hop around on its own.

Contrary to popular belief, songbirds don't fly from the nest. They "hop." For days, young songbirds hop around the nest area, hiding in tall grasses and bushes while learning to fly. During this time, the parents continue to protect and feed them. Human interference is not needed. The best chance these young birds have to survive is to be left to the training of their parents.

If you find a baby songbird that you are sure needs rescuing, here's how to be of best assistance.

1. Place the baby in a tissue or paper towel lined box that has a few air holes in the top.

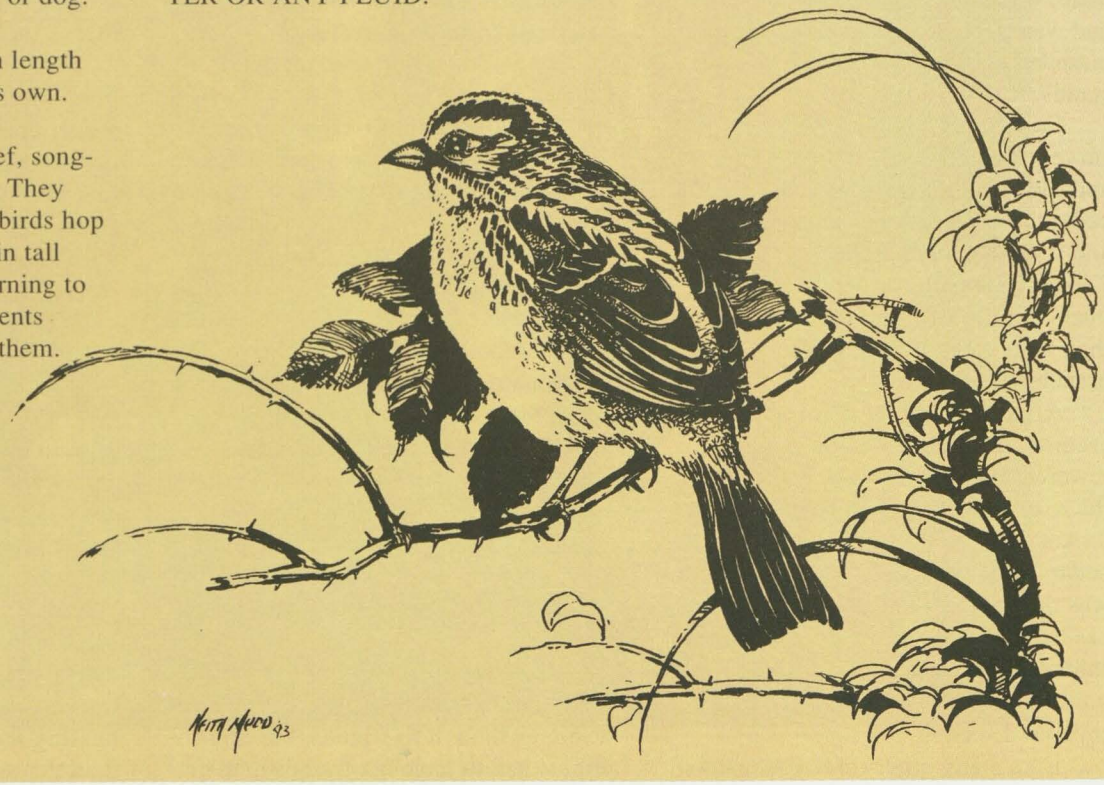
2. Keep the box in a warm area, away from drafts and air conditioning.

3. DO NOT FEED IT ANYTHING AT ALL.

4. DO NOT FORCE FEED IT WATER OR ANY FLUID.

5. Call a licensed wildlife rehabilitator in your area. Telephone numbers of these rehabilitators may be obtained by called the regional office of the Florida Game and Fresh Water Fish Commission nearest you. Otherwise, call a veterinarian for advice. Many veterinarians accept injured or orphaned wildlife at no charge. They work closely with the local wildlife rehabilitators and will see that the baby songbird gets help from the appropriate source.

LeeAnn Pennington is an education specialist in the South Region of the Florida Game and Fresh Water Fish Commission, and past president of the Florida Wildlife Rehabilitators Association.



How The Top Trophy Bucks Are Taken

Text and Photograph by Lt. Stan Kirkland

Every year Florida produces several exceptional bucks. Here are the stories of how some of the largest of the 1993-94 hunting season were taken.

On the morning of Jan. 22, 1994, a Saturday, Tommy Sims of Jackson County arose at 6:30 and, instead of hunting, decided to visit his 60-acre wooded tract near town (Marianna) and cut a cedar tree he'd spotted earlier for making a hat rack. Grabbing his .270 rifle, which he surely couldn't leave, he stepped out the door into a gray, windy day with the temperature near 30 degrees. He had no idea that he'd soon bag one of the largest bucks killed in the state that season.

Some minutes later, Sims, gun in hand, walked down a dim woods road and was startled when a doe and spike bounded off from near one of his tree stands.

Freezing in his tracks, Sims surveyed the area through his scope and saw something move behind a cedar tree. "I kept the scope right there and it wasn't but a second or two until I could tell the movement was a big buck. I really couldn't tell much more than that, though, through the branches," he said.

After standing there for what seemed like eternity, Sims slowly lowered his rifle and took one step off the road. At that moment a huge buck took a small step from behind the cedar. Sims drew in his breath. This was the buck a number of acquaintances had seen while traveling on nearby Interstate 10. Although Sims had been hunting it furiously, this was the first time he'd seen it.

Like many other rural youngsters, Tommy Sims grew up hunting, chasing squirrels across hardwood hollows, and at the ripe old age of 15 bagged his first Florida whitetail. Although he's killed many deer since then and learned an incredible amount about their habits and behavior, he was convinced he couldn't kill this deer.

Sims had no idea that he'd soon bag one of the largest bucks in the state that season.

"I had hunted the area pretty hard all season," he said, "and had found several 3-inch trees he was rubbing and some good-sized scrapes, but I hadn't seen the deer. In fact, I had written him off and was hunting another place over near Vernon." Now here he was.

Squatting to find the best vantage point, Sims could clearly see the buck's enormous rack. Holding his breath, he put the cross hairs on the buck's neck and fired a single shot.

The buck turned out to be a nontypical 15-point, which scored a whopping 172 Boone and Crockett points.

Hunters will usually tell you how proud they are of their deer and of their desire to show it to friends, but Sims almost had to have his friends help get his deer out of the woods. The below-freezing temperatures had turned the rainwater in the back of his truck to ice, and he slipped and slid repeatedly before getting the 200-pound buck in the truck.

Then, in his excitement, he drove off and left his gun leaning against a tree. He didn't get far before he remembered it. Sims' first stop was his home, where he showed his deer to his wife and son. Then it was on to a local sporting goods store, where word quickly spread.

The measurements of the massive buck were incredible. The right and left antler beams measured 23 and 22 3/8 inches, respectively, and the rack had a 22 3/8-inch outside spread. The inside spread measurement was 20 inches, and both beams measured more than 5 inches near the skull.

Sims' buck was taken during the heart of the rut in the Panhandle, a time when more than one big buck has met his demise. Regardless of the timing, this buck was not bad for someone whose mission for the day was to find a hat rack tree.

At 30 years old, Eric Sorensen has a job a lot of ardent deer hunters envy. He manages a sod farm in his home county of Jefferson and, while the spring, summer and early fall are his busiest times, he has ample opportunity in the winter months to partake in one of his passions – deer hunting.

Sorensen hunts almost exclusively on private property in Jefferson County, which is in the state's central hunting zone with earlier hunting dates than the rest of the Panhandle.

Sorensen grew up as a hunter too, under the tutelage of older brother Jeff, who still lives nearby. Whether it was good teaching, luck or skillful hunting, Sorensen last season managed to kill not one, but two bragging-sized trophy bucks.

When Sorensen's alarm clock went off before dawn Nov. 18, he almost cancelled out on the trip. It had rained and thundered most of the night, but the rain seemed to have ended. He made the short trip to his hunting spot. Although it was warmer than he liked, and foggy, Sorensen settled into his 10-foot ladder stand and the action started just after sun-up.

At 7 a.m. a young 4-point fed down the hardwood bottom, practically under his leaning stand. As he later recalled, "That's the closest I've ever had a deer come by me and never smell me."

A few minutes later, Sorensen was watching a shooting lane to his right and he saw a deer move, then stop. Before long the deer moved again and Sorensen could tell little in the dim light, except that it was a buck with dark antlers. Deciding the buck was definitely a wall-hanger, Sorensen prepared to shoot. Then the deer stopped about 40 yards away behind a black gum tree.

"He stood there checking things out for what seemed like a minute or more but it was probably only a few seconds," Sorensen recalled. "Then he stepped out and started walking straight toward me. He stopped when he was about 25 yards from me and looked off to the left, and I shot him one time with my .270."

Driving his truck as close as possible, Sorensen mustered his strength to get the monstrous buck into the truck alone. Sorensen then drove to Monticello to show his wife his trophy. As you'd expect, word quickly got out about his good fortune.

Like the Sims buck, Sorensen's deer was rutting and had left several large scrapes up and down the bottom. The neck of a rutting buck is usually swollen – this one measured 27 inches in diameter. It was a typical 16-pointer that weighed 245-pounds and scored 145 3/8 B & C points.

Returning to the same hunting grounds a month later, on Dec. 15, Sorensen took a 10-pointer that scored an impressive 133 7/8. It weighed exactly 200 pounds. It too was rutting, following a big doe and a 4-pointer across a broomsedge field.

Perhaps the strangest thing about Sorensen's two bucks was that, large as they were, they apparently had never been seen by Sorensen or any of his hunting companions.

Sorensen says the only negatives about killing the two huge bucks have been the numerous questions and calls from other hunters wanting to hear his story and see the racks. He grins, however, when he talks about the distractions.

Lt. Stan Kirkland is the public information coordinator for the Commission's Northwest Region.

See the Florida Buck Registry on page 30.

Eric Sorensen displays a 10-point and 16-point trophy buck taken during the 1993-94 hunting season.

Florida Buck Registry

Compiled by Thomas J. Wright

Since the Florida Buck Registry was established in 1982, hunters have been bringing their deer racks to the Game and Fresh Water Fish Commission to see if they qualify for listing. During that time, members of the Commission's Wildlife Reserve have scored more than 2,200 sets of antlers.

The Buck Registry serves both to recognize sportsmen who take trophy bucks, and to help educate the public about what is necessary to produce such bucks – namely, sound habitat management and controlled harvest of does and small bucks. In order to qualify for the registry, a deer with typical antlers must have a minimum score of 100 inches based on the Boone and Crockett measuring method. Bucks with non-typical racks must score at least 125 B&C inches. The deer must have been taken in Florida by a legal method, and deer taken in previous seasons are eligible for entry.

To have your deer rack scored, contact the Wildlife Reserve Coordinator at the nearest regional office (listed on inside front cover).

TOP 10 FLORIDA

Typical

Name	Location	Date	Score	Points
Larry Furr	Gadsden County	1977	168 1/8	14
Bobby Ray Davis Jr.	Dixie County	1994	159 4/8	11
Chris Harrell	Madison County	1987	156 7/8	12
Gary W. Leis	Taylor County	1987	156 5/8	11
Danny Raines	Jackson County	1973	154 3/8	10
Robbie Hastings	Ocala Nat'l Forest	1940	154 3/8	12
H. M. Butler	Gadsden County	1979	153 7/8	12
Bill Scharber	Pasco County	UNK	153 5/8	10
R. S. Ballard	Columbia County	1980	153 1/8	11
Clifton Davis	Alachua County	1986	152 7/8	11

Non-Typical

Clark Durrance	Wakulla County	1940s	201 3/8	25
Henry Brinson	Jackson County	1959	186	29
W. L. Hurst	Calhoun County	1970	181 2/8	22
Tommy Sims	Jackson County	1994	172	15
Clay H. Mickler	Pasco County	1985	170 4/8	20
Jack K. Austin	Jefferson County	1994	170	14
Angus Hinson	Gadsden County	1992	167 4/8	16
Donnie Nicholson	Escambia County	1972	164 5/8	14
Billy Joe Bass	Madison County	1975	163 1/8	16
Charles Dean	Taylor County	1936	162 5/8	18

TOP FIVE REGIONAL RANKING
Northwest Region

Typical

Larry Furr	Gadsden County	1977	168 1/8
Danny Raines	Jackson County	1973	154 3/8
H. M. Butler	Gadsden County	1979	153 7/8
Nancy Sumner	Liberty County	1981	152 3/8
Ramey Gilley	Jackson County	1964	152 1/8

Non-Typical

Clark Durrance	Wakulla County	1940s	201 3/8
Henry Brinson	Jackson County	1959	186
W. L. Hurst	Calhoun County	1970	181 2/8
Tommy Sims	Jackson County	1994	172
Jack K. Austin	Jefferson County	1994	170

Northeast Region

Typical	Location	Date	Antler Score
Bobby R. Davis Jr.	Dixie County	1994	159 4/8
Chris Harrell	Madison County	1987	156 7/8
Gary W. Leis	Taylor County	1987	156 5/8
Robert S. Ballard	Columbia County	1980	153 1/8
Clifton Davis	Alachua County	1986	152 7/8
Non-Typical			
Billy Joe Bass	Madison County	1975	163 1/8
Charles Dean	Taylor County	1936	162 5/8
Alton Bonds	Suwannee County	1986	156 5/8
Wesley H. Oehmig	Alachua County	1985	153 5/8
Terry Nash	Lochloosa WMA	1990	152 7/8

South Region

Typical			
Bill Scharber	Pasco County	UNK	153 5/8
Mike Sherouse	Hernando County	1970	150 7/8
Pete Wyrosdick	Green Swamp WMA	1989	150 7/8
Charles P. Lykes, Jr.	Highlands County	1977	150 6/8
Max Boswell	Glades County	1990	146 4/8
Non-Typical			
Clay H. Mickler	Pasco County	1985	170 4/8
Ronnie W. Elrod	Highlands County	UNK	160 6/8

Everglades Region

Typical			
G. P. Holly	St. Lucie County	1978	145
Jim Wilson	Indian River County	1985	144
Tom McBroom II	Okeechobee County	1966	140 1/8
Reese Suggs	Martin County	1982	137 4/8
Norman Carnell	Indian River County	1994	135
Non-Typical			
David Wilson	Indian River County	1986	128 4/8
Lonnie Harvey	Indian River County	1986	126 6/8

Central Region

Typical			
Robbie Hastings	Ocala Nat'l Forest	1940	154 3/8
Melvin Arline	Citrus WMA	1980	152 5/8
Charles Roberts	Fort McCoy WMA	1989	151 4/8
Herbert G. Weagraff	Orange County	1986	149 4/8
Rick Hannis	Brevard County	1985	146 7/8
Non-Typical			
R. W. Guess	Ocala Nat'l Forest	1984	148 4/8
Michael Rawlings	Three Lakes WMA	1988	145 5/8
Bob Page	Marion County	UNK	132 5/8

Summary of Scored Antlers	Qualified	Did Not Qualify	
Northeast	445	43	
Northwest	686	85	
South	219	16	
Central	578	70	
Everglades	51	12	
Subtotal Scored	**1,979**	**226**	**Total 2,205**

1995 Cover Art Contest

Deadline for submission of slides: Monday, May 1, 1995

PRELIMINARY JUDGING: Send labeled, high-quality 35mm color slides or transparencies no larger than 4"x 5" of your artwork. Artists may submit up to three entries. Art should fill the entire frame of the slide if possible. Do not photograph framed art. All slides will be returned after the winning art has been published in the July-August issue. Vertically formatted entries and entries that do not meet the contest requirements will not be accepted.

SUBJECT MATTER: Native Florida species from the following categories are suggested:

Nongame species such as turtles, salamanders, butterflies, and birds such as songbirds, wading birds and raptors.

Game and furbearing species such as white-tailed deer, wild turkey, bobwhite quail, mourning dove, ducks, largemouth bass, otter, beaver, fox and bobcat.

Endangered species such as the Florida panther, red-cockaded woodpecker, Key deer and American crocodile.

SIZE AND COMPOSITION: Submissions should follow a horizontal 11 x 17-inch format (size of the magazine unfolded) with the main subject placed on the right-hand half of the work. Remember, the FLORIDA WILDLIFE logo will be placed across the front cover, 2 1/2 inches from the top, right side. The artist's signature should be well integrated with the painting, preferably placed in the lower right-hand corner with at least 3/4" space from the bottom and side edge of the art.

AGREEMENT TO PUBLISH: The winning artist's work will be displayed on the cover of FLORIDA WILDLIFE's July-August 1995 issue. The artist will be paid $500 for the cover and rights to publish 1,000 limited-edition, numbered and signed prints. The agreement will specify delivery terms, vest ownership of the original with the artist and provide the Commission with future rights to feature the work for promotion. The artist will receive 25 prints. Honorable mention winners will receive a cash award.

JUDGING: The judges will be looking for originality, anatomical correctness, color, design, mastery of the medium chosen and appropriateness to the magazine's format.

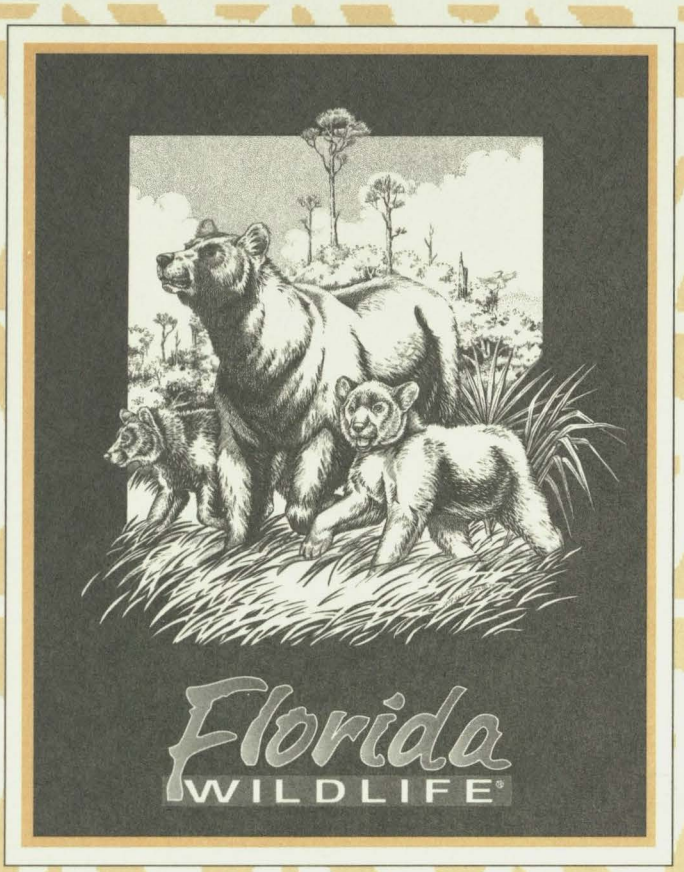
SEND TO: Cover Art Contest, FLORIDA WILDLIFE, 620 South Meridian St., Tallahassee, FL 32399-1600. Include your Social Security number, daytime phone number and a self-addressed, stamped envelope with your entries.

The magazine staff will provide reasonable care for slides received from artists but cannot be responsible for loss or damage. Artists should insure their slides if they feel it is necessary.

New Offer!

For just $19 in new, renewal or gift subscriptions we'll mail you a free copy of the new "Florida Black Bears" poster by Peggy Perkerson, art editor of FLORIDA WILDLIFE magazine. A limited number of posters is available, so act now. This two-color poster in green and black measures 16" X 20". All orders must be prepaid; make check or money order payable to FLORIDA WILDLIFE.

Send payment and this form or photocopy of form to: FLORIDA WILDLIFE, Circulation Office, 620 S. Meridian Street, Tallahassee, FL 32399-1600. Allow 6 to 8 weeks for delivery. This offer expires when supplies are exhausted.



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